

CLAIMS

We Claim:

1. An inflatable support system having at least two sections, said system comprising:
 - a lower chamber comprised of a top and bottom layer; and
 - an upper portion comprising a top and a bottom layer in fluid communication with said lower chamber, wherein at least one of said top and bottom layers of said upper portion has a higher elasticity than at least one of said layers of said lower chamber.
2. The inflatable support system of claim 1, wherein said upper portion and said bottom chamber are formed from PVC material.
3. The inflatable support system of claim 2, wherein a pump is removably connected to said inflatable support system.
4. The inflatable support system of claim 2, further comprising a pump attached to a first valve for inflating said upper portion and said lower chamber and a second valve for gradually deflating said upper portion and said lower chamber.
5. The inflatable support system of claim 4, wherein a user can adjust the pressure within said inflatable support system by alternately inflating said inflatable support system with said pump and deflating said inflatable support system with said second valve.
6. The inflatable support system of claim 5, wherein said lower chamber further comprises a side gusset.
7. The inflatable support system of claim 6, wherein said top and said bottom layers of said upper portion are welded together and said upper portion is welded to said top layer of said lower chamber.

8. The inflatable support system of claim 7, wherein said bottom layer is comprised of material having a lower elasticity than said side gusset and said top layer of said lower chamber.
9. The inflatable support system of claim 8, wherein said fluid communication is provided by at least one opening defined in said bottom layer of said upper portion in substantial alignment with at least one opening defined in said upper layer of said bottom chamber.
10. The inflatable support system of claim 9, wherein said bottom chamber further comprises a plurality of structural elements defined within said bottom chamber.
11. The inflatable support system of claim 10, wherein said structural elements are elongated ovals.
12. The inflatable support system of claim 11, wherein said structural elements are spaced apart to define interstitial spaces within said bottom chamber.
13. The inflatable support system of claim 12, wherein said structural elements are generally upstanding and vertically positioned.
14. The inflatable support system of claim 13, wherein said upper portion further comprises first and second types of chambers.
15. The inflatable support system of claim 14, wherein said first and second types of chambers are defined by first and second types of welds.
16. The inflatable support system of claim 15, wherein said first and second types of chambers are fluidly connected by openings between said welds.
17. An inflatable support system comprising:
an upper portion at least partially defined by at least a first layer having a first elasticity; and

a lower chamber in fluid communication with said upper portion, said lower chamber at least partially defined by at least a second layer having a second elasticity lower than said first elasticity.

18. The inflatable support system of claim 17, wherein said first layer of said upper portion is a top layer of said upper portion.

19. The inflatable support system of claim 18, wherein said upper portion further comprises a bottom layer of material.

20. The inflatable support system of claim 19, wherein said second layer of material is a top layer of said lower chamber.

21. The inflatable support system of claim 20, wherein said lower chamber is further comprises a bottom layer and a side gusset.

22. The inflatable support system of claim 21, wherein said top layer of said upper portion is constructed from high elastic 16-gauge PVC material.

23. The inflatable support system of claim 22, wherein said bottom layer of said lower chamber extends past at least a portion of an outer edge of said top layer.

24. The inflatable support system of claim 23, wherein said top and said bottom layers of said upper portion are welded together at least at said outer edge of said top layer.

25. The inflatable support system of claim 24, wherein said fluid communication is provided by at least one opening defined in said bottom layer of said upper portion.

26. The inflatable support system of claim 25, wherein said at least one opening is circular.

27. The inflatable support system of claim 26, wherein a plurality of said openings are defined in said bottom layer of said upper portion.
28. The inflatable support system of claim 27, wherein said upper portion is comprised of a plurality of chambers.
29. The inflatable support system of claim 28, wherein said chambers further comprise a first type and a second type of chamber.
30. The inflatable support system of claim 29, wherein said first type of chambers are arranged along the outer edges of two opposing sides of said upper portion.
31. The inflatable support system of claim 30, wherein said second type of chambers comprise all other chambers in said upper portion.
32. The inflatable support system of claim 26, wherein said second layer is welded to produce a textured appearance.
33. An inflatable support system comprising:
 - an upper portion defined by a plurality of flexible panels, at least some of said panels of said upper portion having a first elasticity; and
 - a lower chamber defined by a plurality of flexible panels, at least some of said panels of said lower chamber having a second elasticity less than said first elasticity.
34. The inflatable support system of claim 33, wherein at least some of said panels of said upper portion further comprise 16-gauge PVC material.
35. The inflatable support system of claim 34, wherein at least some of said panels of said upper portion further comprise 18-gauge PVC material.
36. The inflatable support system of claim 35, wherein at least a portion of said lower chamber has a third elasticity less than said second elasticity.

37. The inflatable support system of claim 36, wherein at least some of said panels of said lower chamber further comprise 28-gauge PVC material.

38. The inflatable support system of claim 37, further comprising a plurality of upstanding generally vertical structural elements defined within said lower chamber and forming interstitial spaces therein.

38. The inflatable support system of claim 37, wherein said structural elements are of said second elasticity.

38. A method of supporting a user, said method comprising the steps of: providing an air mattress defining at least two fluidly connected air chambers, each of said chambers being at least partially formed by panels having varying levels of elasticity.

39. The method of claim 38, further comprising the step of providing a pump connected to at least one of said chambers and inflating said chambers using said pump.

40. The method of claim 39, further comprising the step of providing a plurality of structural elements defined within one of said chambers, wherein said structural elements provide added support for a user.

41. The method of claim 40, further comprising the step of providing a valve defined in at least one of said chambers and being capable of gradually deflating said chambers.